

OPR: J42E
MR SEA/54715
30 JULY 1993

TALKING PAPER
ON
POSSIBLE TOXIC CONTAMINATION AT CAMP KINSER

The following actions, regarding the possibility of toxic dumping off MSA - Urasoe, were tasked by J01 on 8 July 93:

1. Confirm. There is no evidence that toxic dumping occurred off MSA - Urasoe. However, there is evidence of environmental contamination by heavy metals and pesticides caused by past hazardous material storage practices. A chronology of events follows:

CHRONOLOGY

- From 1945 to 1973, the US Army stored large amounts of hazardous materials/wastes in the open along the shoreline at MSA (now Camp Kinser).
- Dec 72: CINCUSARPAC directed reporting of all Okinawa excess chemicals to US Army General Material Parts Center.
 - Chemicals were primarily retrograde shipments from Viet-Nam and those declared excess due to the phase down of depot operations.
 - Chemicals were stored in the open lumber yard next to the beach which covered a total storage area of approximately 500,000 square feet (encl 1).
 - Chemicals included insecticides, rodenticides, herbicides, inorganic and organic acids, alkalis, inorganic salts and organic solvents, and vapor degreasers.
 - US Army Base Command Okinawa (USARBCO) was unable to dispose of chemicals either by shipment to CONUS or by sales locally, thus containers deteriorated in the open storage conditions.
- 1 Apr - 31 Aug 73: A project was initiated to cleanup the MSA shoreline by the Joint Environmental Investigative Committee which included the Okinawa Prefectural Government (OPG) and US Army Pacific Environmental Health Agency (USAPACEHEA) (encl 2).

- 19 to 20 Dec 74: A fish kill took place directly offshore from the MSA lumber yard.
- 14 - 16 Jan 75: Dead fish were found along the MSA shoreline.
- 17 Jan 75: Joint investigation was conducted by Urasoe Municipal Office and Urasoe Fishery Cooperative Association (encl 3).
- 22 Jan 75: The incident was studied and reported by USAPACEHEA.
 - USAPACEHEA indicated contamination involving pesticides such as malathion, chlordane, diazinon, DDT, dieldrin, dioxin (agent orange component), and high concentration of PCB's, particularly aroclor 1260 (encl 4).
- 9 Jan - Feb 76: USAPACEHEA documented the investigation and initial cleanup. The action was taken by US Army Garrison Okinawa (encl 5).
 - Cyanide compounds were neutralized, flushed into the sanitary sewer system, and the sludge was buried at the lot across from the MSA theater.
 - Ferric chloride (27,800 pounds) was buried across from the MSA theater in a 30 ft long by 10 ft wide and 5 ft deep trench.
 - Inorganic acids and alkalis were neutralized and flushed over the lumber yard grounds.
 - Pesticides were repackaged and buried at a landfill site. Note - coordinates match current Kin dump site.
- Nov 77: A joint study was conducted by the OPG and the USAPACEHEA (encl 2).
 - The results showed high concentrations of heavy metals but low concentrations of pesticides.
- 15 Jun - 1 Sep 1978: USAPACEHEA letter summarized the necessity for continued sampling and analyses of the shoreline area with respect to pesticide levels in the soil and water (encl 6).
- Sep 1984: The Navy Hospital, Okinawa (NAVHOSP), was asked

to determine acceptability of the offshore area at Kinser for recreational swimming.

- NAVHOSP recommended that further sampling be conducted (encl 7).
- Feb - 3 Jun 85: Additional soil samples were analyzed for dioxin and tested negative, however, the shoreline remained closed to recreational activities as a precaution (encl 8).
- Oct 86: Another fish kill took place offshore from Camp Kinser.
 - It resulted from excavation associated with Urasoe City port facility construction.
 - Analysis of soil, water and fish contained elevated levels of pesticides chlordane and dieldrin, PCB contaminated oil and heavy metals (encl 9).
- Nov 89: Naval Facilities Engineering Command, Pacific Division (PACNAVFACENGCOM) was requested to investigate the suitability of the Kinser beach area for recreational use.
- Jan 90: PACNAVFACENGCOM stated that a detailed study was needed at a cost of more than \$500,000 (encl 10).
- May 90: An Environmental Assessment was made by PWO, MCB Butler, for subject area (encl 11).
- Jan 91: An Environmental Summary was drafted by PWO, MCB Butler, for subject site (encl 12).

2. Develop strategy, after facts are in, to notify GOJ. TBD

3. After picture clears, develop Q & A's. The following potential questions have been identified; the answers will be formed as the situation develops.

Q1: When did you find out?

A1:

Q2: What did you do when you find out?

A2:

Q3: What are you doing to ensure that it won't happen again?
A3:

Q4: What types of toxic chemical might have been released into the soil and into the water?
A4:

Q5: What danger to the public do these chemicals cause?
A5:

Q6: What is the USG doing to protect the Okinawan people from these chemicals?
A6:

4. Confirm, - Year, - Type Toxin, - Quantity.

<u>YEAR</u>	<u>TYPE TOXIN</u>	<u>QUANTITY</u>
prior to 1973	Arsenic	Unknown
ditto	Cadmium	Unknown
ditto	Chlordane	Unknown
ditto	Chromium	Unknown
ditto	Cyanide	Unknown
ditto	DDE	Unknown
ditto	DDD	Unknown
ditto	DDT	Unknown
ditto	Dieldrin	Unknown
ditto	Diazinon	Unknown
1976	Ferric Chloride	27,800 lbs
prior to 1973	Lead	Unknown
ditto	Lindane	Unknown

ditto	Malathion	Unknown
ditto	Mercury	Unknown
ditto	PCB	Unknown

5. Summary Report.

BACKGROUND.

- Based upon official documentation (encls 1 - 12) the following areas were contaminated with heavy metals and pesticides by the Army between 1945 and 1973:
 - The water area off MSA (now Camp Kinser)
 - The Camp Kinser shoreline
 - The old MSA lumber yard & Chemical Field Storage Area
- The following areas were used as local disposal sites during clean-up operations and may be contaminated:
 - The old lime pit across from the MSA theater
 - The current Kin dump site
 - The old MSA lumber yard
 - The old MSA 540 yard
- Three fish kills have been reported in the water area off MSA: Dec 74, Jan 75, and Oct 86.
- From 1973 to 1986, numerous soil, water and fish samples were taken in the vicinity of MSA. All were superficial.
- In 1990, PACNAVFACENGCOCOM estimated that a detailed study of the area would cost more than \$500 K (encl 10).
 - High cost of study due to large size of area and technical detection difficulty

DISCUSSION.

- Defense Environmental Restoration Account (DERA) funds cannot be used to perform investigation or remediation in foreign countries.
 - Survey efforts must be supported by either service O&M funds or OSD environmental funds.
 - Remediation efforts would have to be funded under the FIP.

- Preliminary environmental survey efforts (under \$50 K) are normally available through service channels.
 - If preliminary survey results indicate a more extensive survey is required, COMUSJAPAN would support service request for OSD environmental funds through USCINCPAC.
- Detailed environmental surveys (which the PACNAVFACENGCOM recommendation certainly is), would have to be OSD funded.
 - COMUSJAPAN would support service efforts to obtain OSD environmental funding through USCINCPAC.
- Should environmental survey results indicate clean-up actions are required, USFJ would request GOJ fund any remediation efforts through the FIP.
- Environmental surveys of past US hazardous waste dump sites, no longer on US controlled SOFA property, can not be funded by US O&M funds. Category "E" FIP funding should be pursued to conduct these surveys.

CONCLUSIONS.

- All environmental surveys to date have been cursory.
- Extensive sampling is needed to determine the actual extent of contamination, if any, remaining at Camp Kinser and the **Kin dump**.
- Survey may be just the "down payment" on eventual remediation actions, which will be predicated on the outcome of the site investigations.